

*The Nebula in Cygnus. By Prof. Winnecke.*

(Extracts from letters to Lord Lindsay.)

I beg to express my best thanks for the kind announcement of the interesting discovery of Mr. Webb.

November 28, the Moon being full, I could look at the new nebula. With the Orbit-sweeper (aperture 6 Paris inches, power 260) it looked like a star of the 8th magnitude out of focus, and the object-glass not centred. It was oblong in the direction  $136^{\circ} 1$ , with a lucid point like a star 10-11 mag. in the preceding part; greatest diameter,  $5'' 5$ ; least,  $4'' 9$ . The nearest star which I could see in the bright moonlight was 11 mag. By four measures I found :—

Neb.—\* 11 mag.

Dist. =  $135^{\circ} 7$ .Pos. angle =  $282^{\circ} 0$ .

On applying a stellar spectroscope the spectrum appeared to be continuous, but rather knotty (perhaps bright lines?). It was about 3' long, and quite different from the nearly monochromatic gaseous spectrum of H. iv. 18, which was looked at immediately afterwards.

I should feel much obliged if you would communicate these remarks to the next meeting of the Royal Astronomical Society in London.

Strasburg, 1879, Nov. 30.

I wrote to you on Mr. Webb's new planetary nebula, on November 30. Afterwards I saw it (December 2), but the night was very foggy, so that the small star near it was not visible. The nebula had the appearance of a very small comet, the nucleus being near the preceding edge; it was elongated in  $p = 134^{\circ} 3$  (1), and with the wire-micrometer the length of the major axis was found (with power 365) =  $6'' 2$  (1). On applying the small Merz star spectroscope, I was very much surprised to find the light nearly monochromatic! Yesterday evening it was very clear, and I could look, for the first time, at the nebula in a dark sky. The spectrum was decidedly of the gaseous character; the first very bright image of the nebula was crossed by a long faint ray, which is to be ascribed, probably, to the spectrum of the small nucleus, which was afterwards very prominent with power 365. The small Merz star spectroscope (without slit) showed yesterday the spectrum of the star 9.1 mag. near it (B.D.,  $41^{\circ}$ , No. 4001) about 10' long. I have therefore no doubt that the new nebula is a gas nebula; still I can by no means understand the observation of November 28; perhaps a clue may be found in the circumstance that the nebula was not

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visible that day in the finder, the moon being too bright. Still the clock was driving perfectly the Orbit-sweeper, as it did yesterday evening with  $-13^{\circ}$  C. I should be very glad if another astronomer had observed the nebula with a spectroscope at the same time. The position of the small star preceding the nebula was found:—

Dec. 7              Dist. =  $136\cdot9$  (4)              Pos. angle =  $281\cdot9$  (4)

Pos. angle of elongation of the nebula  $p = 132\cdot3$  (2)

Length of major axis =  $5\cdot7$  (1)

*Strasburg, 1879, Dec. 8.*

### *Observation of General Catalogue (Supplement) No. 6,000.*

By Lord Lindsay.

This object is marked "Planetary?" in the Harvard Zones (*Annals*, vol. i. p. 67). Assuming that this query indicated that the object was seen as a planetary nebula by W. C. Bond, D'Arrest observed it at Copenhagen, but found it quite stellar in appearance. At the suggestion of Mr. Dreyer, it was observed prismatically at Dun Echt on December 10 by Ralph Copeland. The spectrum is quite continuous and offers no peculiarity; the object is therefore not a nebula at all. It is identical with D.M.+ $0^{\circ}$  No. 4741, 8·8 mag.

### *Note on Mimas and Hyperion.* By A. A. Common, Esq.

Attempts were made in 1877 and 1878, with an 18-inch Reflector, to observe *Mimas*, but without success; on two nights it was thought to have been seen. *Hyperion* was seen on several nights.

With the 36-inch telescope *Mimas* can be fairly well seen when some  $3''$  or  $4''$  from end of ring; one attempt to follow it up to conjunction has failed, but under better circumstances it may perhaps be done. The more certain observations (which seem to indicate that the Ephemeris published by Mr. Marth in the *Ast. Nach.* No. 2273 is some one and a half or two hours late) are given below, with some measures of *Hyperion*.

Moonlight that had no effect on *Mimas* utterly obliterated *Hyperion*. This was particularly noticed on the night of November 22.